

## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product identifier used on the label:** ES57 Lime remover and descaler

**Other means of Identification:** ES57

**Recommended use of the chemical and restrictions on use:** For professional use only.

**Manufacturer/Supplier:**

Charlotte Products Ltd.

**Address:**

2060 Fisher Dr.

Peterborough, ON K9J 6X6

**Telephone:** 705-745-5763

**Fax:** 705-745-0220

**24 Hr. Emergency Tel. #:** Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**Classification of the chemical:**

**Label elements:**

**Signal Word:** Danger

**Hazard statement(s)**

H318 Causes serious eye damage

**Precautionary statement(s)**

P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P310	Immediately call a poison center or doctor/physician
P501	Dispose of contents/container in accordance with local regulation

Hazard pictogram(s)



Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 0%

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %
Organic acid salt	506-89-8	5-10
Trisodium Citrate Dihydrate	6132-04-3	1-5
Alcohol Ethoxylate	68991-48-0	1-5
Sodium Lactate	867-56-1	0.1-1
Fragrance	Mixture	<0.1

\*\* If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.

### SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention.

**If inhaled:** Remove the person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

**Most Important symptoms and effects, both acute and delayed:** Causes serious eye damage.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically

### SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Not determined

**Special hazards arising from the substance or mixture:** None known

**Flammability classification:** Not flammable

**Hazardous combustion products:** Carbon oxides, oxides of phosphorus and other unidentified organic compounds.

**Special protective equipment and precautions for firefighters:**

**Protective equipment for fire-fighters:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

**Special fire-fighting procedures:** Move containers from the fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from, and upwind of spill/leak. Restrict access to the area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Methods and material for containment and cleaning up:** Do not allow material to contaminate groundwater systems. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

**Special spill response procedures:** In case of a transportation accident, contact Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International). If a spill/release in the US in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage:** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

**Incompatible materials:** Oxidizing agents. Do not mix with other chemicals or cleaners

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
		ACGIH TLV		OSHA PEL	
Chemical Name	CAS #	TWA	STEL	PEL	STEL

Organic acid salt	506-89-8				
Trisodium Citrate Dihydrate	6132-04-3				
Alcohol Ethoxylate	68991-48-0				
Sodium Lactate	867-56-1				
Fragrance	Mixture				

#### **Exposure controls:**

**Ventilation and engineering measures:** Not required under normal use conditions. For production facilities use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection:** Not required with normal use. If airborne concentrations are above the permissible exposure limit or irritation occurs, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

**Skin protection:** Wear protective gloves to avoid skin contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

**Eye face protection:** Wear eye protection to avoid contact with eyes. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

**Other protective equipment:** Other equipment may be required depending on workplace standards.

**General hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Clear colorless to straw liquid

**Odor:** OCA

**Odor threshold:** No applicable information available

**pH:** 1.5 maximum

**Melting/Freezing point:** No applicable information available

**Initial boiling point and boiling range:** No applicable information available

**Flash point:** No applicable information available

**Flashpoint (Method):** No applicable information available

**Evaporation rate (BuAe = 1):** Similar to water

**Flammability (solid, gas):** Not flammable

**Lower flammable limit (% by vol.):** Not Flammable

**Upper flammable limit (% by vol.):** Not Flammable

**Vapor pressure:** No applicable information available

**Vapor density:** No applicable information available

**Relative density:** ~1.032

**Solubility in water:** Soluble

**Other solubility(ies):** No applicable information available

**Partition coefficient:** No applicable information available

**Auto ignition temperature:** No applicable information available

**Decomposition temperature:** No applicable information available

**Viscosity:** No applicable information available

**Volatile organic Compounds (%VOC's):** No applicable information available

**Other physical/chemical comments:** No applicable information available

## SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** Not normally reactive

**Chemical stability:** Stable

**Possibility of hazardous reactions:** No hazardous polymerization

**Conditions to avoid:** Keep out of reach of children. Do not use it in areas without adequate ventilation. Avoid contact with incompatible materials.

**Incompatible materials:** Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide

**Hazardous decomposition products:** None known. Refer to 'Hazardous Combustion Products' in Section 5

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

**Routes of entry - inhalation:** Avoid breathing vapors or mists

**Routes of entry - skin & eye:** Avoid contact with skin or eyes

**Routes of entry - Ingestion:** Do not taste or swallow

### Potential Health Effects:

**Signs and symptoms of short term (acute) exposure:**

**Symptoms:** Please see section 4 of this SDS sheet for symptoms.

**Potential Chronic Health Effects:**

**Mutagenicity:** Not expected to be mutagenic in humans.

**Carcinogenicity:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects:** No applicable information available

**Sensitization to material:** No applicable information available

**Specific target organ effects:** No data available to indicate product or components will have specific target organ effects.

**Medical conditions aggravated by overexposure:** Pre-existing skin or eye disorders.

**Toxicological data:**

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD <sub>50</sub>	LD <sub>50</sub>	LC <sub>50</sub>
		(Oral, rat)	(Dermal. Rabbit)	(4hr, Inhal., rat)
Organic acid salt	506-89-8	1121 mg/kg		
Trisodium Citrate Dihydrate	6132-04-3	1548 mg/kg		
Alcohol Ethoxylate	68991-48-0	>2000 mg/kg		
Sodium Lactate	867-56-1	>2000 mg/kg		
Fragrance	Mixture		>3000 mg/kg	

\*All empty cells no applicable information available

Other important toxicological hazards: None reported.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** No applicable information available.

**Persistence and degradability:** No applicable information available

**Bioaccumulation potential:** No applicable information available.

**Mobility in soil:** No applicable information available.

**Other Adverse Environmental effects:** No applicable information available.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Handling for disposal:** Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

**Methods of disposal:** Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA:** If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the

proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

## SECTION 14 - TRANSPORTATION INFORMATION

**Special Shipping Information:** Keep from freezing.

**T.D.G. Classification:** UN1760, CORROSIVE LIQUID, N.O.S. (UREA MONOHYDROCHLORIDE), Class 8, PG III

**Special Provisions:** 16

**Explosive Limit and Limited Quantity Index:** 5L

**ERAP Index:** None

## SECTION 15 - REGULATORY INFORMATION

**TSCA information:** All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

**Canadian Environmental Protection Act (CEPA) information:** All ingredients listed appear on the Domestic Substances List (DSL).

## SECTION 16 - OTHER INFORMATION

### Legend:

**ACGIH:** American Conference of Governmental Industrial Hygienists

**CAS:** Chemical Abstract Services

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act of 1980

**CFR:** Code of Federal Regulations

**EPA:** Environmental Protection Agency

**IARC:** International Agency for Research on Cancer

**LC:** Lethal Concentration

**LD:** Lethal Dose

**NTP:** National Toxicology Program

**OSHA:** Occupational Safety and Health Administration

**PEL:** Permissible exposure limit

**RCRA:** Resource Conservation and Recovery Act

**SDS:** Safety Data Sheet

**STEL:** Short Term Exposure Limit

**TWA:** Time Weighted Average

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### DISCLAIMER

Information for this safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of this supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of GHS. No warranty, expressed or implied, is made and the supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained within this form.

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